

Application No. 10/672,186
Amdt date April 2, 2009
Reply to Office action of January 2, 2009

Amendments to the Claims:

This listing of claims will replace all prior versions and listings of claims in the Specification.

Listing of Claims:

1. (Previously presented) A method of determining the routing of interconnected regions of a routing problem by considering all required connections in parallel independently and attempting to resolve crossing conflicts only when at least some contextual information about a region and the paths that cross in the region has been assembled.
2. (Previously presented) The method according to claim 1, wherein resolving of crossing conflicts is attempted only when all possible relevant contextual information has been assembled.
3. (Previously presented) The method according to claim 1, comprising the steps of:
 - (a) defining, for each set of regions to be connected, routing which represents a suitable manner of connecting them, respecting only those crossing conflicts which have been explicitly registered with the set currently being considered;
 - (b) examining connections across shared boundaries;
 - (c) collating all such proposed routing and resolving any crossing conflicts in a symmetric manner;
 - (d) registering such crossing conflicts with the sets of regions which will be required to respect them on the next pass;
 - (e) repeating steps (a) to (c) until a sufficient completion and quality of routing solution is attained; and
 - (f) converting the routing into suitable geometric representations of routing paths in a way which takes all desired routing into account symmetrically and simultaneously.

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4. (Previously presented) The method according to claim 3, in which the regions are polygons and the shared boundaries are edges.

5. (Previously presented) The method according to claim 1, wherein the interconnected regions are regions of an electrical circuit.

6. (Previously presented) A computer-implemented method of determining the routing of interconnected regions of a routing problem, the interconnected regions being regions of an electrical circuit, by considering all required connections in parallel independently and attempting to resolve conflicts only when at least some contextual information about a region and the paths which cross there has been assembled.